



State of Idaho

DEPARTMENT OF WATER RESOURCES

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DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

November 10, 2004

Re: Order Requiring Measuring Devices and Headgates in Water District 37, Croy Creek and Tributaries

Dear Water User,

The Idaho Department of Water Resources (IDWR) has issued the enclosed order requiring installation of measuring devices and headgates for all diversions of water from Croy Creek and tributaries. Please note that headgates and measuring devices must be installed prior to June 1, 2005. A copy of the order and this letter is being sent to those users identified in the mailing list attached to the order.

This order is being sent to users on Croy Creek as a result of an application in writing from right holders on the creek requesting the Water District 37 watermaster to begin regulation and control of water. Adequate measuring and lockable control works are essential for proper administration by the watermaster.

Please note that the attached order requires users to submit plans for installation of measuring devices and headgates. Plans must be submitted to the Department on or before January 31, 2005. Plans should include descriptions of the general type or make of measuring devices and headgates, as well as a schematic showing the dimensions and locations of headgates and measuring devices. Please also describe the water source, legal description and name of the diversion for which any plan is submitted, and include your name, address and phone number with the plan.

Pursuant to Section 42-701, Idaho Code, users who neglect to comply with any provision of Department orders requiring installation of measuring devices and lockable controlling works may be subject to the administrative enforcement actions provided by Section 42-1701B, Idaho Code. Enforcement actions may include the issuance of Notices of Violation and Cease and Desist Orders, as well as possible civil penalties.

Attached also are IDWR Minimum Standards for Measuring Surface Water Diversions. Additional information regarding standard measuring devices and minimum standards can be obtained by referring to IDWR's web site at: www.idwr.state.id.us/water/districts/water_measurement.htm. This web site has links to the following documents and publications.

1. IDWR Minimum Acceptable Standards for Open Channel and Closed Conduit Measuring Device

2. Bureau of Reclamation Measurement Manual
3. University of Idaho Water Measurement Pamphlet

All right holders on Croy Creek and tributaries will be assessed annual charges beginning in 2005 by the Water District to pay for the cost of regulation by the watermaster. The minimum annual charge is \$40.00. Questions regarding annual assessments can be brought up at the annual Water District meeting which is to be held January 11, 2005 at 1:30 p.m. in the old Hailey Court House. IDWR also sends individual notices to water right holders and will coordinate with the watermaster in sending you a letter regarding this annual meeting.

The Department asks for your full cooperation concerning this matter. If you have questions concerning this matter please contact me directly at the above location or contact the IDWR Southern Regional office in Twin Falls at 208-736-3033.

Respectfully,



Steve Burrell, PE
Water Distribution Section

c: IDWR Southern Region
Kevin Lakey, Water District 37 Watermaster

Attachments: Order Requiring Measuring Devices and Controlling Works
Minimum Standards for Measuring Surface Water Diversions

**BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO**

IN THE MATTER REQUIRING MEASURING)	
DEVICES AND CONTROLLING WORKS AND)	
WATER MASTER CONTROL ON CROY CREEK)	ORDER REQUIRING INSTALLATION
AND TRIBUTARIES, WATER DISTRICT 37)	AND MAINTENANCE OF
)	CONTROLLING WORKS AND
)	MEASURING DEVICES
<hr/>		

In 2004, the Idaho Department of Water Resources (“Department”) received a written petition from waterusers on Croy Creek and tributaries requesting the watermaster of Water District 37, Big Wood River and tributaries, to regulate and control the waters of Croy Creek and tributaries, including Elk Creek.

FINDINGS OF FACT

1. In recent years, water rights on Croy Creek and its tributaries have not been administered by the watermaster of Water District no. 37 (“watermaster”).
2. By letter dated August 3, 2004, six water users holding water rights diverted from Croy Creek and/or Elk Creek requested that Croy Creek and Elk Creek be actively administered by the watermaster of Water District no. 37.
3. On October 7, 2004, the Department inventoried diversion works and measuring devices on Croy Creek and Elk Creek and determined that the diversion works and measuring devices were inadequate or non-existent.
4. Croy Creek and its tributaries are surface water sources located within Water District No. 37. The watermaster should administer the Croy Creek and tributary water rights.

CONCLUSIONS OF LAW

1. Idaho Code § 42-701 provides, in pertinent part, as follows:

42-701. INSTALLATION AND MAINTENANCE OF CONTROLLING WORKS AND MEASURING DEVICES BY WATER APPROPRIATORS -- PROCEDURE UPON FAILURE TO INSTALL AND MAINTAIN -- MEASURING AND REPORTING OF DIVERSIONS -- PENALTY FOR FAILURE TO COMPLY -- ENFORCEMENT PROCEDURE -- REPORT FILING FEE.

(1) The appropriators or users of any public waters of the state of Idaho shall maintain to the satisfaction of the director of the department of water resources suitable headgates and controlling works at the point where the water is diverted. Each device shall be of such construction that it can be locked and kept closed by the watermaster or other officer in charge, and shall also be of such construction as to regulate the flow of water at the diversion point. Each such appropriator shall construct and maintain, when required by the director of the department of water resources, a rating flume or other measuring device at such point as is most practical in such canal, ditch, wellhead or pipeline for the purpose of assisting the watermaster or department in determining the amount of water that may be diverted into said canal, ditch, wellhead or pipeline from the stream, well or other source of public water. Plans for such headgates, rating flumes or other measuring devices shall be approved by the department of water resources.

...

(3) Any appropriator or user of the public waters of the state of Idaho that neglects or refuses to construct or maintain such headgates, controlling works, or measuring devices, or has not executed an agreement in lieu of a measuring device as provided in subsection (2) of this section, upon receiving ten (10) days' notice from the director of the department of water resources within which to begin and diligently pursue to completion the construction or installation of the required device or devices or to begin and diligently pursue to completion a remedy to such defects as exist in accordance with said notice, then the director of the department of water resources may order the duly qualified and acting watermaster of the water district to shut off and refuse to deliver at the point of diversion, the water owned by such appropriator or user until the user does construct and maintain such headgates, controlling works or measuring devices or remedy the defects which exist or the director may take action pursuant to section 42-1701B, Idaho Code, to enforce the requirement to construct, install or maintain such devices.

(4) The appropriators or users of the public waters of the state of Idaho shall be given a reasonable time within which to complete construction of such headgates, controlling works or measuring devices, depending upon the size and extent thereof, when due diligence has been used in the prosecution of such work.

2. Idaho Code § 42-610 provides that holders of water rights within a water district are required to pay assessments equal to the proportion of their volume of water diverted to the total volume diverted times the total assessment of the district.

3. In order for the watermaster to properly execute his duties, adequate measuring devices and controlling works must be installed at all points of diversion from Croy Creek and tributaries.

ORDER

IT IS HEREBY ORDERED AS FOLLOWS:

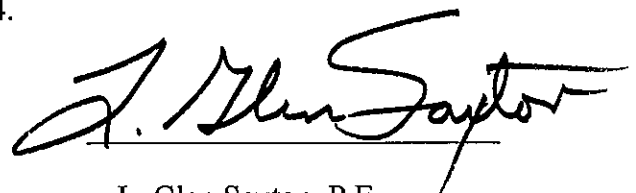
1. On or before January 31, 2005, all water right holders diverting water from Croy Creek and tributaries shall submit plans for measuring devices and lockable controlling works to the Department and to the watermaster of Water District No. 37 for review and approval.

2. On or before June 1, 2005, all holders of water rights describing Croy Creek and tributaries within Water District 37 as a source of water shall install and maintain measuring devices and lockable controlling works of a type acceptable to the Department.

3. After June 1, 2005, the watermaster shall shut off and refuse delivery of water to any diversion from Croy Creek and its tributaries that does not have an adequate measuring device and/or lockable controlling works.

4. Water District No. 37 shall assess holders of water rights describing Croy Creek and tributaries as a source for the expenses related to the distribution and administration of water.

Dated this 10 ^{*th*} day of November, 2004.



L. Glen Saxton, P.E.
Administrator
Water Management Division

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 10th day of November, 2004, the above and foregoing document was served on the following by placing a copy of the same in the United States mail, postage prepaid and properly addressed to the following:

SCOTT P GARVIN
PO BOX 3467
HAILEY ID 83333

RUTH M DEHLMAR
PO BOX 366
HAILEY ID 83333

USDI - BLM
IDAHO STATE OFFICE
1387 S VINNELL WAY
BOISE ID 83709-1657

USDI - BLM
PO BOX 2B
SHOSHONE ID 83352

BENJAMIN & HELEN CROCKER TRUST
C/O DONALD & HELEN CROCKER
PO BOX 974
KETCHUM ID 83340-0974

DIAMOND A LIVESTOCK INC
1997 S 1875 E
GOODING ID 83330

FAULKNER L & L CO INC
1989 S 1875 E
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STATE OF IDAHO
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LESLIE CLARKE
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GW INC
PO BOX 809
AURORA OR 97002-0809

IDWR -SOUTHERN REGION
1341 FILLMORE ST., SUITE 200
TWIN FALLS, ID 83301-3380


Cindy Dalby
Technical Records Specialist
Water Distribution Bureau

**STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES (IDWR)**

**MINIMUM ACCEPTABLE STANDARDS FOR
OPEN CHANNEL AND CLOSED CONDUIT
MEASURING DEVICES**

The source and means of diversion of water, whether surface or ground water, generally determines the measurement and reporting process. Surface water sources such as streams, springs and waste channels are normally diverted into open channels (ditches or canals), but closed conduits (pipes or culverts) are also used. Ground water is usually diverted into pipes (which may also discharge into open channels).

Measuring devices are required at or near the point of diversion from the public water source.

Open Channel

SURFACE WATER DIVERSIONS

I. Flow Measurement

The following discussion is applicable only to diversions from surface water sources. Measurement of a ground water diversion with an open channel measuring device must be pre-approved by the Department.

A. Standard Open Channel Measuring Devices

All open channel flow diversions should be measured using one of the following standard open channel flow measuring devices commonly used in Idaho:

- contracted rectangular weir
- suppressed rectangular weir
- Cipolletti weir
- 90 degree V-notch weir
- ramped broad crested weir (or ramped flume)
- Parshall flume
- trapezoidal flume
- submerged rectangular orifice
- constant head orifice

Construction and installation of these devices should follow published guidelines. References are available upon request.

B. Non-standard open channel devices: Rated Structures or Rated Sections

IDWR may authorize the use of non-standard devices and rated sections provided the device or section is rated or calibrated against a set of flow measurements using an acceptable open channel current meter or a standard portable measuring device. Further restrictions and requirements are available from the Department upon request.

CLOSED CONDUIT MEASURING DEVICES

Closed conduit or pipe line diversions require installation of a flowmeter.

I. Flow Measurement

There are many flowmeters on the market, with costs ranging from several hundred dollars to several thousand dollars. In general, the higher priced meters are more accurate and require less maintenance. Most meters on the market have an acceptable accuracy rating for IDWR's guidelines. However, some types and designs are much more prone to maintenance problems. Moving parts tend to wear when sand or silt is present, and moss often plugs small orifices and slows moving parts. No single flowmeter is best for every situation. We recommend that you visit with qualified dealers and discuss your needs with them.

A. Minimum Standards

The following are minimum standards for closed conduit flowmeters:

- Minimum manufacturers' design accuracy of +/- 2 percent of reading
- Installed accuracy of at least +/- 10 percent of reading
- Meter must be calibrated with an independent, secondary measuring device when installed, and at least once every four years thereafter
- Must read instantaneous flow or be capable of flow rate calculation
- Must record total volume
- Non-volatile memory (power outage does not zero volume reading)
- Sufficient digits to assure "roll-over" to zero does not occur within 2 years
- Volume reading cannot be "reset" to zero
- Installed to manufacturers' specifications

Meter manufacturers typically specify that a meter must be located in a section of straight pipe at least 10 pipe diameters downstream and 5 pipe diameters upstream of any valves, bends, contractions, or other interferences which will distort the flow pattern. However, some types of meters will produce acceptable results when installed in shorter sections of straight pipe. For example, at least one electro-magnetic flowmeter provides excellent measurement accuracy with only 5 lengths of straight pipe upstream from the meter.

Each manufacturer should provide the installation specifications for its meters. These **specifications must be adhered to** in order to achieve the accuracy required for the water measurement program. Again, we stress the importance of visiting with a qualified dealer and discussing your specific needs with them.

B. Types of Measuring Devices for Closed Conduits

Types	Pipe Sizes	Maintenance Required	Relative Purchase Price
Differential Head <ul style="list-style-type: none">• Orifice• Venturi• Annubar	small to large	Low to high. Sand wears on sharp edges, and particles can plug small orifices and tubes.	low to medium
Force Velocity <ul style="list-style-type: none">• Turbine• Propeller• Impeller	small to large	Typically moderate to high. Often problematic when exposed to sand or moss. Some cannot measure low velocities	low to medium
Ultrasonic	small to large	Low. Typically non-invasive with no moving parts to wear	high
Vortex	small to medium (about 12 to 14 inch maximum pipe diameter)	Low. Few or no moving parts to wear.	high
Electro-Magnetic	small to medium (about 12 to 14 inch maximum pipe diameter)	Low. No moving parts. Can provide good results with shorter lengths of straight pipe.	high

**EXPLANATORY INFORMATION
TO ACCOMPANY A
FINAL ORDER**

(To be used in connection with actions when a hearing was not held)

(Required by Rule of Procedure 740.02)

The accompanying order is a "Final Order" issued by the department pursuant to section 67-5246, Idaho Code.

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a final order within fourteen (14) days of the service date of this order as shown on the certificate of service. **Note: The petition must be received by the Department within this fourteen (14) day period.** The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See section 67-5246(4), Idaho Code.

REQUEST FOR HEARING

Unless the right to a hearing before the director or the water resource board is otherwise provided by statute, any person who is aggrieved by the action of the director, and who has not previously been afforded an opportunity for a hearing on the matter shall be entitled to a hearing before the director to contest the action. The person shall file with the director, within fifteen (15) days after receipt of written notice of the action issued by the director, or receipt of actual notice, a written petition stating the grounds for contesting the action by the director and requesting a hearing. See section 42-1701A(3), Idaho Code. **Note: The request must be received by the Department within this fifteen (15) day period.**

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, any party aggrieved by a final order or orders previously issued in a matter before the department may appeal the final order and all previously issued orders in the matter to district court by filing a petition in the district court of the county in which:

- i. A hearing was held,
- ii. The final agency action was taken,
- iii. The party seeking review of the order resides, or
- iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of: a) the service date of the final order, b) an order denying petition for reconsideration, or c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration, whichever is later. See section 67-5273, Idaho Code. The filing of an appeal to district court does not in itself stay the effectiveness or enforcement of the order under appeal.

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